



IAEA

60 Years

Atoms for Peace and Development

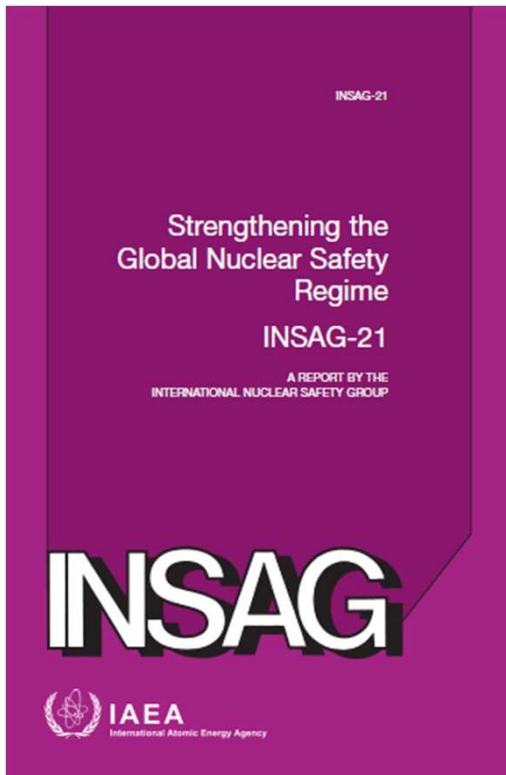
THE GLOBAL NUCLEAR SAFETY AND SECURITY FRAMEWORK

December 2016, Vienna, Austria

Yassine Chaari

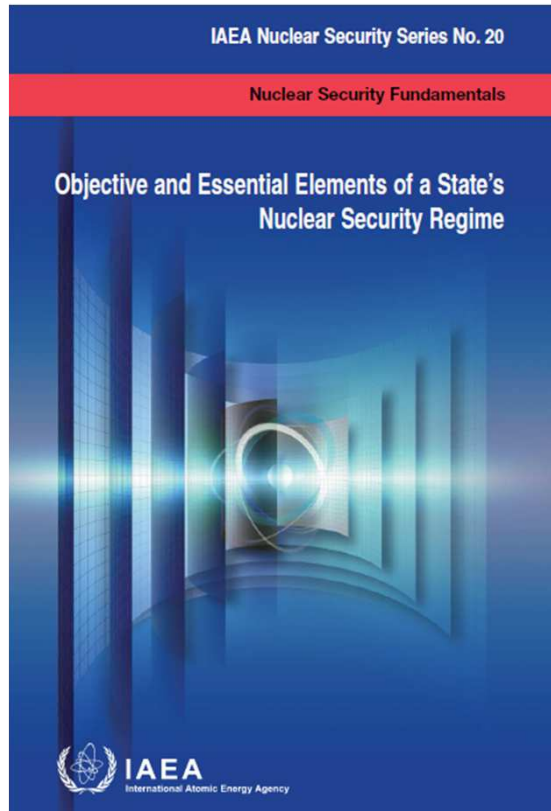
***Office of Safety and Security Coordination
Department of Nuclear Safety and Security***

Strengthening The Global Nuclear Safety Regime



- Elements of The Global Nuclear Safety Regime
- Development of The Convention on Nuclear Safety Process
- Enhanced utilization of the IAEA Safety Standards
- Enhanced exchange of Operating Experience
- Multinational cooperation for the safety review of new nuclear power plant designs

Nuclear Security Regime



- “Nuclear security and nuclear safety have in common the aim of protecting persons, property, society and the environment. Security measures and safety measures have to be designed and implemented in an integrated manner to develop synergy between these two areas and also in a way that security measures do not compromise safety and safety measures do not compromise security.”
- **12 ESSENTIAL ELEMENTS OF A STATE’S NUCLEAR SECURITY REGIME**

The Global Safety and Security Framework

The GNSSN was created in 2006 following the recommendations contained in the International Nuclear Safety Group (INSAG) report on Strengthening the Global Nuclear Safety Regime (INSAG Series No. 21, IAEA, Vienna, 2006).



What is the gap?

In addition to INSAG 21 the following elements need to be considered:



- Nuclear security
- Radiation facilities
- Nuclear and radiation activities
- Capacity building
- Other global and regional elements of the framework
- Stakeholder roles and responsibilities

Proposed definition and Objective of GNSSF



The Global Nuclear Safety and Security Framework (GNSSF) is defined as the institutional, legal and technical **structure** for ensuring safety and security of nuclear and radiation facilities (installations) and activities throughout the world.

The objective of this framework is to provide guidance to a world where all the nuclear and radiation facilities are operating safely and securely.

The proposed Framework



- Nuclear Safety and **Security** International and Regional Legal Instruments
 - binding and non binding legal instruments
 - **Regional Agreements**
 - The Vienna Declaration on Nuclear Safety
- The IAEA Standards, Guides and Services
- **Capacity Building**
- **Research & Development**
- **Communication**
- Elements of a national nuclear safety and **security regime**
- **Safety Culture and Leadership**

Conventions: NSC, JC,
CPPNM, UNSCR 1540...etc

International
Instruments

CoCs: RRs &
S&S of RSs

IAEA
Safety Standards
&
Security
Guidance

IAEA
Safety & Security
Peer Reviews
&
Advisory Services

Sharing information
and knowledge
International Cooperation
Capacity Building

Regulations &
Enforcements

National & Regional Nuclear
Safety & Security Infrastructure

Operation &
Use

Research, Education & Training, knowledge management



IAEA

60 Years

Atoms for Peace and Development

Capacity Building Methodology



A systematic and integrated approach to develop and continuously improve competences and capabilities necessary for achieving safe, secure and sustainable nuclear power programme.

Research & Development



- No major R&D areas require immediate attention, but a number of areas where more work would be desirable and beneficial
- Cooperation and collaboration among all stakeholders is necessary for effective utilization of resources and for maximising the benefits of results in research
- Post-accident recovery activities will need considerable R&D effort, and international collaboration is essential.
- R&D efforts are needed to harmonize rapid response strategies to nuclear or radiological emergencies at the national, regional and international levels.

Communication



- Public trust is the basis for organizational credibility: Focus before, during and after an emergency should be on building, strengthening, maintaining trust
- A public communications plan needs to be developed at the facility, local, national, regional and international levels.
- Understanding the media's needs in informing the public and the public's response is of fundamental importance
- Reinforce messages early and often. Ensure that is heard, understood and accepted. Need to monitor communication outcomes via social media to adjust messaging and focus, to accommodate current public concerns

International cooperation



- A systematic way of sharing regulatory experience
- Process for making information about lessons learned available to others
- effective system for internal and external dissemination of nuclear safety knowledge
- Promotion of cooperation and coordination among regional networks/forums.

Regional and national Cooperation



- Implementation of global initiatives;
- Establishment of regional and global CB/E&T Centre
- Promotion of regional networks/Forums
- Harmonization of good practices via regional initiatives;
- Development of National Nuclear Safety and security programmes to support all the processes;
- Involvement of all the relevant national stakeholders;
- Communication with regional and international communities ;

Stakeholder Roles



- Role of the government
- Role of organizations
- Role of individuals

Levels

- International level
- Regional Level
- National level

